Notice of Allowability	Application No.	Applicant(s)	
	10/651,696	ZANZIG ET AL.	
	Examiner	Art Unit	
	Rip A. Lee	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.

2. ☒ The allowed claim(s) is/are *1-14*.

3. ☐ The drawings filed on _____ are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 08-29-2003
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Henry C. Young, Jr. on January 19, 2005.

Claim 1, line 9	delete "correspondingly,"
Claim 1, line 13	replace "and" with "or"
Claim 1, line 19	delete "(e.g. silanol groups)"
Claim 1, line 22	insert "silica or" between "precipitated" and "silica-containing"
Claim 1, line 27	delete "(e.g. silanol groups)"

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claim 2, line 5	delete "correspondingly,"
claim 2, line 11	delete "(e.g "
claim 2, line 12	delete "silanol groups)"
claim 2, line 16	replace "35" with "30"
claim 2, line 16	replace "95" with "90"
claim 2, line 19	delete "(e.g. silanol groups)"

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claim 5, line 5	delete "correspondingly,"
claim 5, line 13	"(e.g. silanol groups)"
claim 5, line 21	"(e.g. silanol groups)"

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 1-14 are allowed over the closest reference, KR 2001-17712, U.S. Patent No. 5,916,957 to Itoh *et al.*, and U.S. Patent No. 6,090,880 to Zimmer *et al.*

The present invention is drawn to a tire having at least one component comprised of a rubber composition which comprises (A) 100 phr of elastomers, (B) about 25-95 phr of reinforcing filler, and (C) bis(triethoxysilylpropyl)polysulfide coupling agent wherein the polysulfide bridge contains an average of 2 to 2.6 sulfur atoms. Specifically, elastomer (A) is made of (1) about 10-95 phr of aqueous emulsion polymerization derived styrene/butadiene copolymer which contains pendant hydroxyl groups and has a bound styrene content of about 15-28 % and (2) about 5-90 phr of tin-coupled organic solvent polymerization derived elastomer. The reinforcing filler (B) is comprised of (1) about 35-75 phr of carbon black and about 5-20 phr of precipitated silica or silica-containing carbon black, or (2) about 5-30 phr of carbon black and about 35-90 phr of precipitated silica or silica-containing carbon black.

KR 2001-17712 describes a tire treads composition comprised of 50-95 pw of solution-polymerized, silicon-coupled styrene/butadiene rubber, 5-40 pw of solution polymerized, tin-coupled styrene/butadiene rubber, 0-30 pw of butadiene rubber, 30-70 pw of carbon black, 20-60 pw of silica, and 5-10 pw of silane coupling agent. The reference does not teach or suggest use of styrene/butadiene copolymer that contains pendant hydroxyl groups.

Itoh *et al.* discloses tire tread composition comprised of organic solution polymerized styrene/isoprene rubber having a bound styrene content of 5-25 % and a terminal-modified copolymer prepared by reacting polymer with an organotin compound. The composition may further comprise an emulsion polymerized styrene/butadiene rubber. The reference does not teach or suggest use of styrene/butadiene copolymer that contains pendant hydroxyl groups.

Zimmer *et al.* teaches a rubber composition comprised of 50-80 phr of tin-coupled styrene/butadiene or styrene/isoprene elastomer. The composition may further comprise emulsion polymerized styrene/butadiene rubber. The reference does not teach or suggest use of styrene/butadiene copolymer that contains pendant hydroxyl groups.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The prior art made of record but not relied upon is considered pertinent to the Applicant's disclosure.

U.S. Patent No. 6,548,578 to Pawlikowski discloses a starch / emulsion styrene butadiene copolymer. As shown in the figure in column 1, the starch units, and hence, the overall polymer, would contain pendant hydroxyl groups.

U.S. 2002/0120052 to Wendling et al. discloses a quaterpolymer based on conjugated diene, vinyl substituted aromatic compounds, olefinically unsaturated nitriles and monomers containing hydroxyl or epoxy groups.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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January 19, 2005

DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700